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P56378**REMARKS**

This reply is in response to telephone discussion with the Examiner on Monday, the 7<sup>th</sup> of July 2003.

Claims 1-9, 15, 16, 21-39, and 41-51 are pending in this application.

The examiner stated in the Office action that claims 4 and 9 remained to contain allowable subject matter.

**I. Objection To Claims 1, 2, 6, 7, 11, 13, 15, 21, 24, 31 And 34**

The Examiner has objected to the language of claims 1, 2, 6, 7, 11, 13, 15, 21, 24, 31 and 34 as containing an informality. The Examiner requested amendment of Applicant's term for the unit measurement of viscosity. The Examiner's attention is invited to the attachment published by Penreco, a division of the petroleum giant Conoco, which clearly shows Applicant's term "CST@", as opposed to the symbol requested by the Examiner--cSt@--. The Examiner is requested to correct the record, to amend Paper No. 5 to show the correct terminology, and to acknowledge that Applicant's terminology is in conformance with that of United States industry. The fact that the U.S. Patent & Trademark Office may prefer a different terminology is improper, when the major industries of the United States and Applicant use conforming and identical nomenclature. It is improper therefore, for the U.S. Patent & Trademark Office to require archaic and non-conforming nomenclature. Correction of the record is requested.

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P56378**II. Claim 1****A. Rejection - 35 U.S.C. 102**

In Verdegaal Bros., the Court held that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Verdegaal Bros v. Union Oil Co. of California, 814 F.2d 628 (Fed. Cir. 1987).

The claim 1 defines the *viscosity* and the *flash point* of the hydrocarbon oil for Applicant’s claim 1. Neither Morrison et al. ‘694 nor Morrison et al. ‘329 disclose these features. How is it possible for the Examiner fail to consider the fact that Morrison ‘694’s Drakeoil ® 7, with a viscosity range of 10.8 cTS to 13.6 cTS unambiguously establishes a lack of anticipation of Applicant’s claims 1, 6, 15, 21, 31, 41 and 50. Two, Morrison ‘694 utterly fails to recognize the significance of *flash point*. Morrison ‘694’s flashpoint for Drakeoil ® 7 is said, by Conoco, its manufacturer, to be 177 °C, far below Applicant’s flash point feature. See the attached specification for Drakeoil ® published by Penreco, a division of Conoco. The fact that Morrison ‘694 completely failed to consider either *viscosity*, the need for a *free-standing* candle, or the *flash point* of the hydrocarbon oil component are three items that serve to establish a lack of anticipation of any of Applicant’s claims. Moreover, the importance of these features of Applicant’s invention is explained by Applicant’s specification, for example, page 6, lines 16 through 19; and page 12, lines 2 through 5. Four, there is a reason that Morrison ‘694 teaches a different composition and consistently teaches a candle that is both molded and used within a container, while Applicant’s invention enables the manufacture of a structure that may be used *free-standing*, without an surrounding container. Five, the statement by Morrison ‘694 about “a transparent, stiff ... mineral oil gel ...” (Column 7, lines 1

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and 2) is not anticipation' *stiff* is a relative, indefinite adjective that describes nothing, and does not suggest Applicant's *free-standing*. These five distinct deficiencies in the teachings of Morrison '694 are each, individual evidence of a lack of anticipation.

1. The court stated that "it is incumbent upon the examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference." *Ex parte Levy*, 17 USPQ2d 1461, 1462 (1990).

Here, the examiner did not provide any consideration of claim 1's definition of the viscosity and the flash point of the hydrocarbon oil. Accordingly, the examiner's rejection is not proper.

2. The claimed subject matter is not disclosed in the reference with "sufficient specificity." MPEP 2131.03 states that "[w]hen the prior art discloses a range which touches, overlaps or is within the claimed range, but no specific examples falling within the claimed range are disclosed, a case by case determination must be made as to anticipation. In order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." What constitutes a "sufficient specificity" is fact dependent. If the claims are directed to a narrow range, the reference teaches a broad range, and there is evidence of unexpected results within the claimed narrow range, depending on the other facts of the case, it may be reasonable to conclude that the narrow range is not disclosed with "sufficient specificity" to constitute an anticipation of the claims. The unexpected results may also render the claims unobvious. The question of "sufficient specificity" is similar to that of "clearly envisaging" a species

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from a generic teaching.

This standard has not been met in the continued rejection of claim 1.

Here, Morrison et al. '694 or Morrison et al. '329 discloses just the use of "hydrocarbon oil" or "white oil." There is no teaching about the viscosity and the flash point of hydrocarbon oil or white oil. The examples of Morrison et al. '694 or Morrison et al. '329 disclose the use of Drakeol® 7 as hydrocarbon oil. The typical viscosity and the flash point of Drakeol® 7 are 10.8/13/6 cSt at 40 °C and 177 °C, respectively. (See the attachment published by Penreco, a division of the petroleum giant, Conoco, a dominant manufacturer of "mineral oil" and "white oil" and the supplier of the Drakeoil ® and Penetec lines of mineral oils.) That is, no specific examples falling within the Applicant's ranges are disclosed. The hydrocarbon oils taught by Morrison '694 are far outside those claimed by Applicant. The claimed invention with the claimed viscosity and flash point does not require a jar because the claimed compound can be free standing at room temperature and, unlike the prior art, the heat of the candlewick's combustion does not melt nor deform the body of the candle made with the compound of the present invention.

Also, it cannot be said that one of ordinary skill in the art is able to "at once envisage" the specific viscosity and the flash point to achieve the "free standing" candle merely from the disclosure of "white oil" or "hydrocarbon oil."

Therefore, the examiner's rejection is not proper because the claimed subject matter is not disclosed in the reference with sufficient specificity to constitute an anticipation under the statute.

3. If the examiner's rejection is based on inherency, the examiner must provide rationale or

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evidence tending to show inherency.

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (**reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art**) (emphasis added); In re Oelrich, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is **necessarily** present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted)

Neither Morrison et al. '694 nor Morrison et al. '329 discloses the limitations of viscosity or flash point of hydrocarbon oil. Morrison et al. '694 or '329 discloses at most hydrocarbon oil including white oil. All the white oils do not have the claimed viscosity or flash point. That is, the missing descriptive matter (*i.e.*, viscosity and flash point) is not necessarily present in the thing described in the reference.

Also, there is no evidence of that the candles of Morrison et al. '694 or '329 can be free standing.

In the specification, the applicant defines the phrase "free standing" as the compound "having the ability to stand by itself at room temperature, such that even during use of a candle made with

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the compound, such that the heat of the candlewick's combustion does not melt nor deform the body of the candle made with the compound of the present invention." (Page 2, lines 8 to 12; emphasis added.) While Morrison et al. '694 or '329 discloses "hard" and "stiff" candles, these candles are not necessarily able to "free-stand."

That is, there are candles which are stiff and hard at room temperature but the heat of the wick's combustion deform the body of the candle. Accordingly, the terms "stiff" and "hard" candles are not necessarily the "free standing" candles defined in the present application. The fact that all of the examples and the specification in Morrison et al. '694 and '329 are only directed to jar candles supports this conclusion.

Conclusively, if the examiner's rejection is based on inherency, the examiner must prove that viscosity and flash point is necessarily present in the candles of Morrison et al. '694 or '329 and that, like the present invention, the heat of the candlewick's combustion does not melt nor deform the body of the candles of Morrison et al. '694 or '329.

#### **B. Rejection - 35 U.S.C. 103**

Even if the examiner's rejection is based on "obviousness," the examiner's rejection is not proper for the following reasons.

1. The examiner fails to establish a prima facie case of obviousness because neither the viscosity nor the flash point limitations is taught or suggested in the prior art.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981 (CCPA 1974). "All words in a

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claim must be considered in judging the patentability of that claim against the prior art.” In re Wilson, 424 F.2d 1382, 1385 (CCPA 1970).

As stated above, the claim limitations of the viscosity and the flash point are not taught nor suggested by the prior art. Since the Morrison patents are directed only to jar candles, there is no suggestion or motivation to modify the Morrison patents separately or in combination.

Since the examiner did not show that the claimed ranges of the viscosity and the flash point overlap or lie inside ranges disclosed by the prior art, the examiner failed to show a prima facie case of obviousness.

2. The examiner fails to establish a prima facie case of obviousness because the viscosity and/or the flash point limitations are not recognized as result effective variables in the prior art.

In In re Wertheim, the court held that in the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie case of obviousness exists. The court set out “exceptions to this rule in cases where the results of optimizing a variable, **which was known to be result effective**, were unexpectedly good.” (In re Antonie, 195 USPQ 6, 8 (CCPA 1977), In re Waymouth, 182 USPQ 290 (CCPA 1974)). Thus, it should be noted that, in In re Antonie, the court held that **a particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation**, (559 F.2d 618, 195 USPQ 6 (CCPA 1977)). (In In re Antonie, the claimed wastewater treatment device had a tank volume to contractor area of 0.12 gal./sq. ft. The prior art did not recognize that treatment

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capacity is a function of the tank volume to contractor ratio, and therefore the parameter optimized was not recognized in the art to be a result-effective variable. See also MPEP 2144.05 II. B.) It should be also noted that the court has consistently refused to recognize "obvious to try" rejections. ("[O]bvious to try is not the standard of 35 U.S.C. §103.", In re Tomlinson, 53 CCPA 1421, 363 F.2d 928, 150 USPQ 623 (CCPA 1966)).

In accordance with the above the rules, if a particular parameter is not first recognized as a result-effective variable which achieves a recognized result, a prima facie case of obviousness does not exist.

The examiner's attention is invited to consider the applicant's specification, where the applicant wrote that: "Two of these values [(i.e., viscosity and flash point)] for the hydrocarbon oil of TABLE 1 are very important when choosing the hydrocarbon oil" at page 13, lines 2-5, and that "[w]hen the values for the hydrocarbon oil and copolymer specified for the composition of the compound of the present invention are maintained, a very special relation between the viscosity and the flash point is achieved" at page 11, lines 19-21. The description and the claims of the present application describe the viscosity range of the hydrocarbon oil for the free standing compound and the flash point for allowing the correct combustion of the free standing compound or candle.

Morrison did not recognize the viscosity of the hydrocarbon oil or the flash point of the hydrocarbon oil as a result effective variable to the "free standing" compound." It should be also noted that the court has consistently refused to recognize "obvious to try" rejections.

Therefore, independent claim 1 is patentable..



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3. The present invention is patentable because of the ranges of the hydrocarbon oil and the copolymer.

The claim 1 defines the concentration ranges of the hydrocarbon oil and the copolymer as about 75 to about 88 in weight percent and about 12 to about 25 in weight percent, respectively.

As stated above, in In re Wertheim, the court held that in the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie case of obviousness exists. The court set out “exceptions to this rule in cases where the results of optimizing a variable, which was known to be result effective, were unexpectedly good.” (In re Antonie, 195 USPQ 6, 8 (CCPA 1977), In re Weymouth, 182 USPQ 290 (CCPA 1974)).

Here, the specification of the present application states that “[t]he reasons for the composition of the present invention providing superior and unexpected type results, are related to the chemical characteristics of the hydrocarbon oil, such as a white oil,” “when the values of the hydrocarbon oil and copolymer are below the specified values for the composition of the present invention, the compound could be free standing at room temperature but the heat of the wick's combustion can melt the compound to a liquid point,” and “[o]n the other hand, when more polymer than what is specified in the present invention is used to harden the compound or composition, the compound or composition can inflame with the combustion produced by the candle's wick.” (page 11, line 17 to page 12, line 5) That is, even if these claimed concentration ranges of the hydrocarbon and the copolymer lie inside ranges disclosed by Morrison et al. '694 or Morrison et al. '329, the results of optimizing the concentration ranges of the hydrocarbon oil and the copolymer are unexpectedly good for the above reason.

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Therefore, claim 1 is patentable over Morrison et al. '694 and '329

### **III. Claim 6, 15, 21 and 31**

Independent claims 6, 15, 21 and 31 are also patentable.

Claim 6, 15, 21 and 31 recite the features of the viscosity and the flash point of the hydrocarbon oil.

Therefore, these independent claims 6, 15, 21 and 31 are patentable for the same reason stated in "claim 1."

### **IV. Claims 2-5, 7-9, 16, 22-30, and 32-39**

Reconsideration of the rejection of dependent claims 2-5, 7-9, 16, 22-30, and 32-39 is also respectfully requested because the applicant has presented above reasons why independent claims 1, 6, 15, 21 and 31 are patentable and claims 2-5, 7-9, 16, 22-30, and 32-39 depend effectively from claims 1, 6, 15, 21 or 31.

### **V. Claims 41-51**

The examiner stated that the new claims 41 to 51 directed to a process of manufacturing the free standing candle are withdrawn from consideration because of the "constructive election" doctrine.

First, the applicant traverses the examiner's argument because claims 41 to 51 include the same features as are present in claims 1 to 40, and claims 41 to 51 and the mandatory field of search

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for claims 1 to 40 are therefore classified in the same classification. Also, the search of the claims 41 to 51 is inherently a subset of the search of the claims 1-9, 15, 16, 21-39, since the claims 41 to 51 are limited to methods involving the compositions as recited in the claims 1-9, 15, 16, 21-38, or 39. The compositional limitations of the method claims 41 to 51 are found in the compositional limitations of the claims 1-9, 15, 16, 21-38, or 39. Therefore, no search of additional classes should be necessary. Accordingly, the examiner's argument of "constructive election" is not proper, and all of these claims must be examined. Such action is respectfully requested.

**Second**, Applicant notes that claims 41 through 51 use either the same, or comparable definitions of Applicant's invention. Under U.S. practice,

"[w]here the claims of an application define the same essential characteristics of a *single* disclosed embodiment of an invention, restriction therebetween should never be required. This is because the claims are but different definitions of the same disclosed subject matter, varying in breath or scope of definition." *Manual of Patent Examining Procedure*, 8<sup>th</sup> Edition, Revision 1.

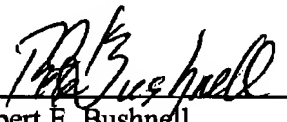
In essence, the *Manual* prohibits restriction under the guise of "election by original presentation", or under any other theory. Accordingly, the Examiner's refusal to consider claims 41 through 51 is improper; all of the pending claims must be examined. Reconsideration and such action is respectfully requested.

In view of the above, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

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Should a Petition for extension of time be required with the filing of this Amendment, the Commissioner is kindly requested to treat this paragraph as such a request and is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of the incurred fee if a check of the requisite amount is not enclosed.

Respectfully submitted,

  
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